



IN THE ABSTRACT:

JAN 03 2005 This invention relates to a cylinder head (1) for a multi-cylinder liquid-cooled internal combustion engine, with having a cooling chamber configuration (3) adjacent to a fire deck, which is divided by an intermediate deck (4) essentially parallel to the fire deck (2) into a lower cooling chamber (5) next to the fire deck, and an upper cooling chamber (7) adjoining the lower one in the direction of the cylinder axis (6), where the lower and upper cooling chamber (5,7) communicate communicating with each other via at least one first transfer opening (9), and where at least one first transfer opening (9) is provided in the area of an opening (20) receiving a preferably centrally disposed fuel injection device (11), and where at least one coolant inlet (13) per cylinder (A,B,C), which is preferably located in the fire deck (2), opens into the lower cooling chamber (5), and at least one coolant outlet (32) departs from the upper cooling chamber (7), and where a lower cooling chamber (5) is associated with each cylinder (A,B,C), and the lower cooling chambers (5) of at least two adjacent cylinders (A,B,C) are essentially separated from each other by a partitioning wall (12) and, the coolant flow in the lower cooling chamber (5) is essentially transverse to the cylinder head (1), and where the upper cooling chamber (7) extends over at least two cylinders (A,B,C). In order to improve cooling it is proposed by the invention that, the first transfer opening (9) be being disposed at a distance (a) from the opening (20) receiving the fuel injection device, said and the distance (a) between said the openings (20,9) having a defined minimum.

Serial No.: 10/619,464
Docket No.: 66376-325-7
Amdt. Dated Jan. 3, 05
Reply to Office action of Oct. 2, 04

Fig. 1